

FIGURE 16-A

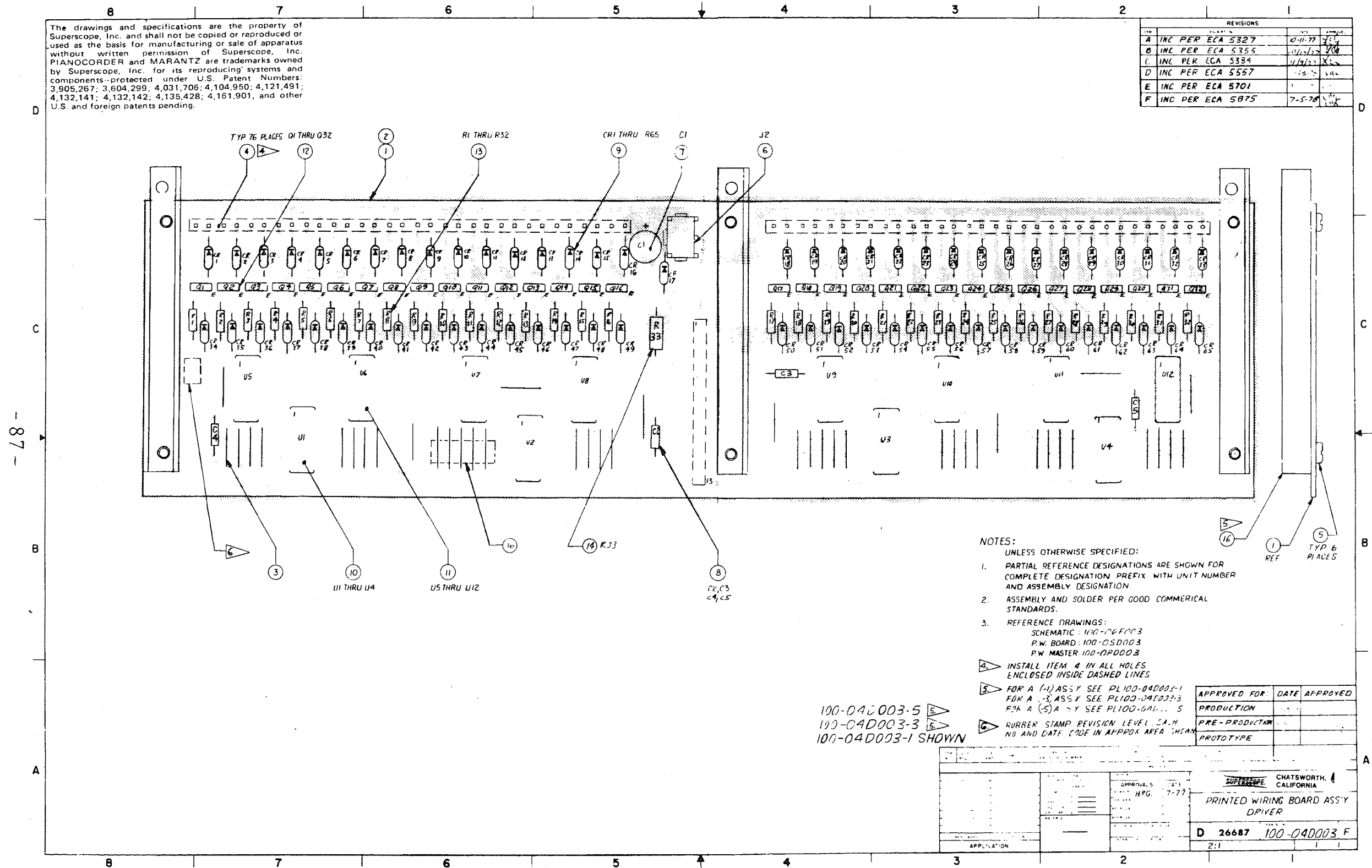
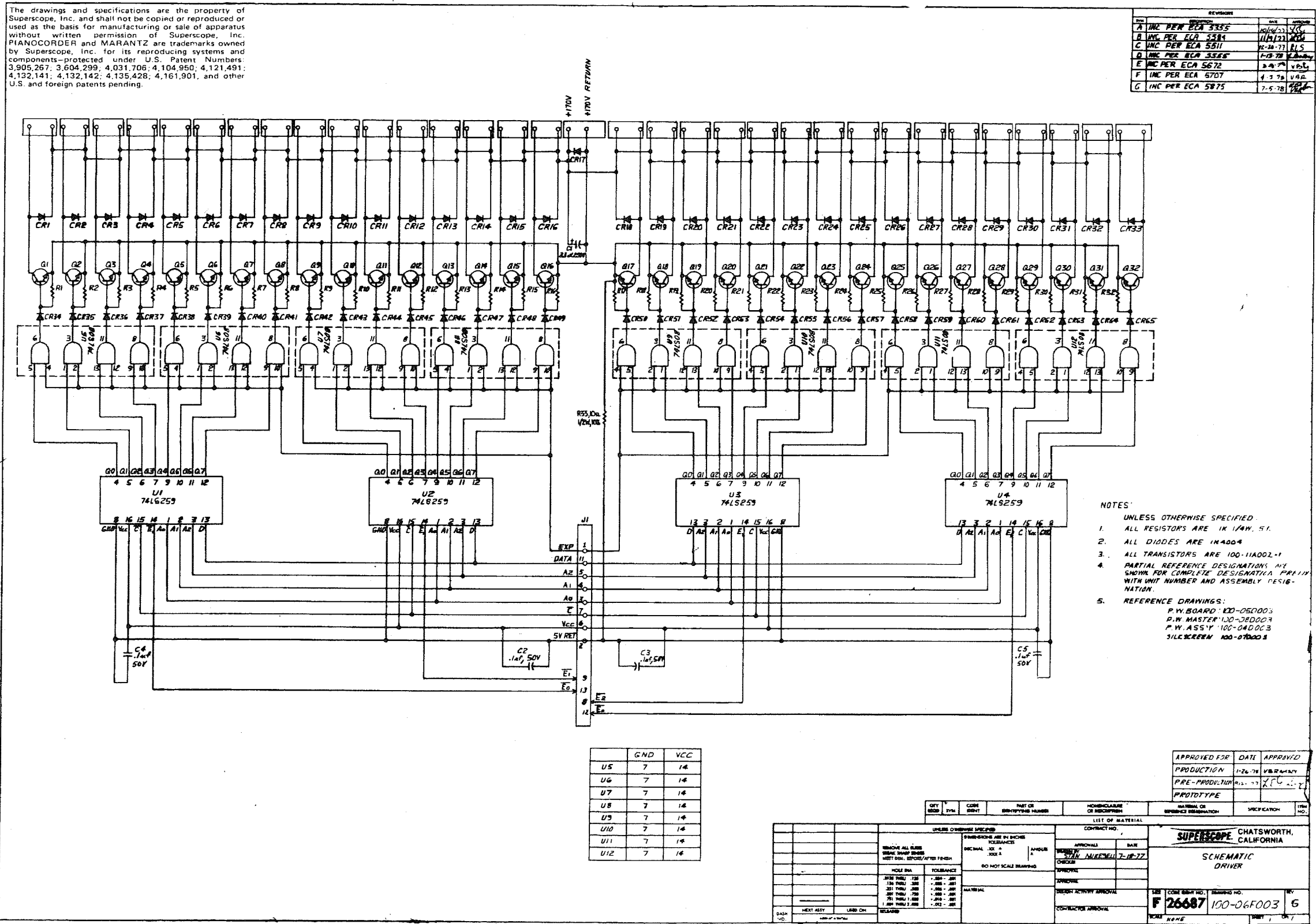
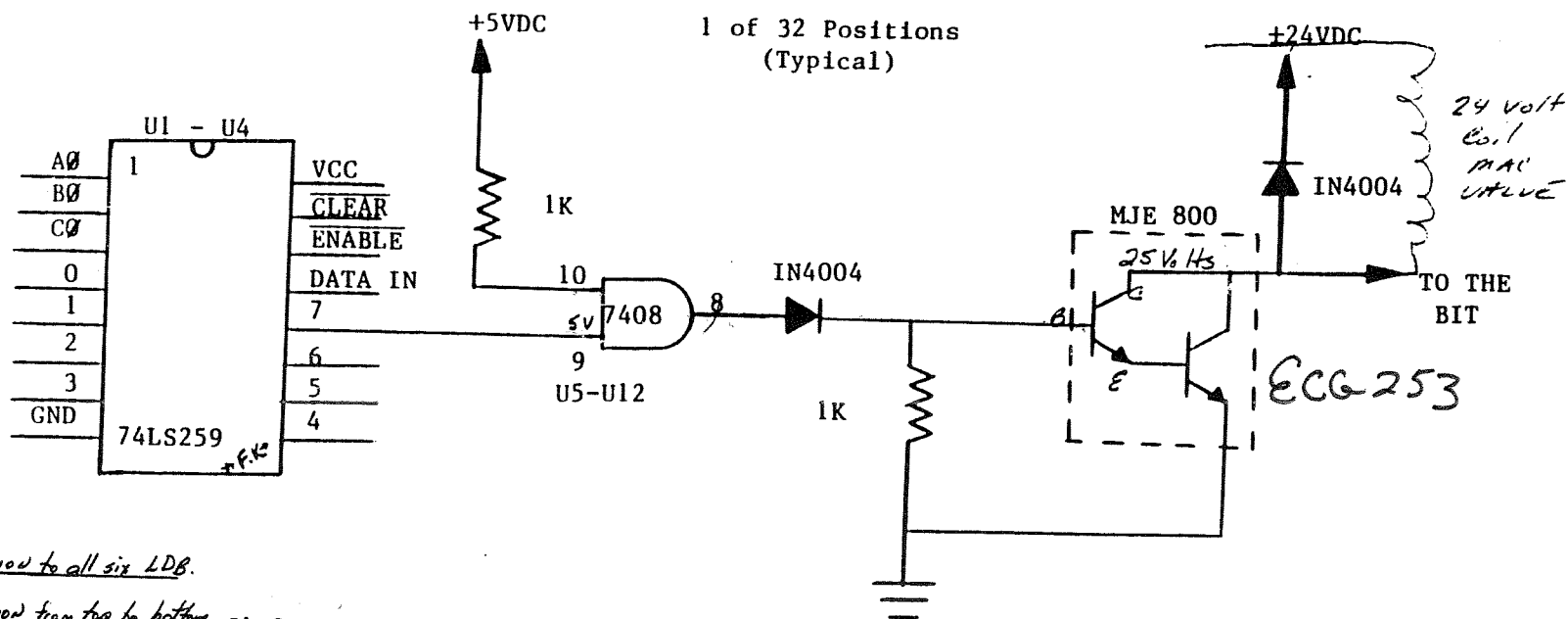


FIGURE 16-B



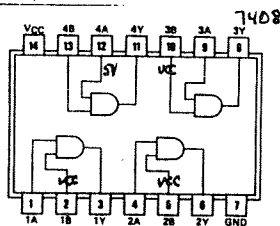
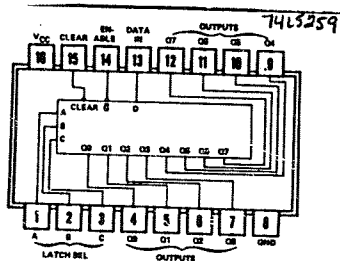
# LONG DRIVER BOARD SCHEMATIC (Partial)



● Address lines are common to all six LDB.

● ENABLE lines are common from top to bottom.

| J1-3     | J1 | ON BOARD TIE POINTS |
|----------|----|---------------------|
| -----    | 1  |                     |
| -----    | 2  | GND                 |
| 47 ----- | 3  | PIN 1 U1 - U4       |
| 46 ----- | 4  | PIN 2 U1 - U4       |
| 45 ----- | 5  | PIN 3 U1 - U4       |
| 48 ----- | 6  | VCC (+5VDC)         |
| 22 ----- | 7  | PIN 15 U1 - U4      |
| 19 ----- | 8  | PIN 14 U3           |
| 18 ----- | 9  | PIN 14 U2           |
| -----    | 10 | KEY                 |
| 21 ----- | 11 | PIN 13 U1 - U4      |
| 20 ----- | 12 | PIN 14 U4           |
| 17 ----- | 13 | PIN 14 U1           |



4 ENABLE LINES PER LDB.

12 ENABLE LINES PER DRAWER

3 ADDRESS LINES

2 DATA LINES

## 74LS259 TRUTH TABLES

FUNCTION TABLE

| INPUTS  | OUTPUT OF ADDRESSED LATCH | EACH OTHER OUTPUT | FUNCTION             |
|---------|---------------------------|-------------------|----------------------|
| CLEAR G |                           |                   |                      |
| H L     | D                         | Q <sub>i0</sub>   | Addressable Latch    |
| H H     | Q <sub>i0</sub>           | Q <sub>i0</sub>   | Memory               |
| * L L   | D                         | L                 | 8-Line Demultiplexer |
| L H     | L                         | L                 | Clear                |

LATCH SELECTION TABLE

| SELECT INPUTS | LATCH ADDRESSED |
|---------------|-----------------|
| C B A         |                 |
| L L L         | 0               |
| L L H         | 1               |
| L H L         | 2               |
| L H H         | 3               |
| H L L         | 4               |
| H L H         | 5               |
| H H L         | 6               |
| H H H         | 7               |

H = high level, L = low level  
D = the level at the data input  
Q<sub>i0</sub> = the level of Q<sub>i</sub> (i = 0, 1, ..., 7, as appropriate) before the indicated steady-state input conditions were established.